

Amendments to the Drawings:

Please amend the drawings as follows:

In Figures 1-3, please add the legend -- Prior Art --.

In Figure 4, please change the wording in accordance with the attached replacement sheet.

In Figure 5, please change the wording in accordance with the attached replacement sheet.

In accordance with the Rules, replacement drawing sheets identified in the top margin as
"Replacement Sheet" are enclosed.

Serial No. 10/800,219

Art Unit: 2825

Page 8

05-01-06 14:35 Pg : 13/22

TREXLER, ETAL.

Fax sent by : 3127048023

REMARKS

The present application has been amended in response to the Examiner's Office Action to place the application in condition for allowance. Applicant, by the amendments presented above, has made a concerted effort to present claims which clearly define over the prior art of record, and thus to place this case in condition for allowance.

Title

In the Office Action, the Examiner indicated that the title is not descriptive. The title has been amended accordingly.

Specification

The specification has been amended to state the meaning of the terms "CD", "DI", "DICD", and "FICD". As such, Applicant requests that the Examiner's objection to the disclosure be withdrawn.

Drawings

Figures 1-3 have been amended to include the legend --Prior Art-- and Figures 4 and 5 have been revised. Replacement sheets incorporating these revisions are attached.

Claim Rejections

Claims 1-2 and 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,658,640 (Weed), Claims 3-5 and 7-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Weed in view of United States Patent No. 6,421,820 (Mansfield et al.), claims 10 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mansfield et al. in view of United States Patent No. 6,562,638 (Balasinski et al.), and claims 12-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mansfield et al. in view of Balasinski et al. and further in view of Weed.

Serial No. 10/800,219
Art Unit: 2825
Page 13

The claims have been amended to more specifically claim the present invention, and to further distinguish the claimed invention from that which is disclosed in the cited references. For example, claim 1 now specifically claims a method for verifying post-optical proximity corrected mask wafer image sensitivity to reticle manufacturing errors, where the method includes the steps of statistically modifying layout polygons based on reticle critical dimension specifications to construct a statistical virtual mask; obtaining virtual mask image response function statistical parameters; and comparing the statistical parameters to process tolerance requirements. Applicant respectfully submits that this is neither disclosed nor suggested by the cited references, either when taken alone or in combination.

The present invention as claimed effectively provides for the introduction of reticle manufacturing errors in the process of constructing a virtual mask prior to manufacturing the reticle and for the numerically evaluating the impact of the reticle manufacturing errors (reticle CD specifications) on, for example, DI/FI-yield or on DICD/FICD distributions. In contrast, Weed's method, for example, is to take any manufactured reticle with the have-been-already-made manufacturing variances and then physically (by some piece of equipment) create the optical image of that reticle, then simulate the wafer image of the reticle optical image and create a unique mask map in order to tune process conditions for each reticle.


Serial No. 10/800,219
Art Unit: 2825
Page 14

In view of the above amendments and remarks, Applicant respectfully submits that the claims of the application are allowable over the rejections of the Examiner. Should the present claims not be deemed adequate to effectively define the patentable subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

Dated: May 1, 2006

By:


James R. Foley, Reg. No. 39,979
Paige A. Kitzinger, Reg. No. 45,219
Trexler, Bushnell, Giangiorgi,
Blackstone & Marr, Ltd.
105 W. Adams Street, 36th Floor
Chicago, Illinois 60603
(312) 704-1890

961930.WPD

Serial No. 10/800,219
Art Unit: 2825
Page 15